What is claimed as new and desired to be protected by Letters Patent of the United States is:

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1. A method of operating a distributed Bragg reflector laser device, said method comprising the steps of:

using a first feedback loop to periodically adjust a characteristic of said laser device in response to a sensed wavelength; and

using a second feedback loop to periodically adjust a current applied to said laser device in response to a sensed amplitude, and wherein said step of using said second feedback loop occurs during said step of using said first feedback loop.

2. The method of claim 1, further comprising the step of affecting the temperature of said laser device in response to said sensed wavelength.

3. The method of claim 2, further comprising the step of using a third feedback loop to adjust a gain current applied to a gain section of said laser device.

4. The method of claim 3, further comprising the step of operating said third feedback loop in response to said amplitude.

5. The method of claim 4, wherein said step of using said third feedback loop occurs during said step of using said first feedback loop.

6. The method of claim 2, further comprising the step of using a third feedback loop to operate an amplifier associated with said laser device.

7. The method of claim 6, further comprising the step of operating said third feedback loop in response to the output power of said amplifier.

8. The method of claim 7, wherein said step of using said third feedback loop occurs during said step of using said second feedback loop.

9. The method of claim 2, further comprising the step of calculating transmission fraction data based on a reference power output and a filtered power output.

10. The method of claim 1, further comprising the step of using a backface loop to compensate for aging, said backface loop being operated based on signals from a backface monitor.

11. A method of starting-up a tunable light source, said method comprising the steps of:

providing data in a memory representative of mode-hopping values for said tunable light source;

with reference to said data, calculating a value representative of a tuning current for said tunable light source; and

applying said tuning current to said tunable light source.

12. The method of claim 11, further comprising the step of adjusting the temperature of said tunable light source, and wherein said step of applying said tuning current occurs during said step of adjusting the temperature of said tunable light source.

13. The method of claim 12, further comprising the step of storing curve data in a memory.

14. The method of claim 13, further comprising the step of applying a second tuning current signal to said tunable light source as a function of said curve data.

15. A method of changing the wavelength channel of a laser device, said method comprising the steps of:

operating said laser device at a first wavelength; and

applying a tuning current to said laser device as a function of a second wavelength and mode-hopping data stored in a memory, said second wavelength being different than said first wavelength.

16. The method of claim 15, wherein said step of applying said tuning current includes the step of reading curve data from a memory.

17. The method of claim 15, further comprising the step of using a thermo-electric cooler to control the temperature of said laser device, and wherein said thermo-electric cooler is operated by a digital feedback loop.

18. The method of claim 15, further comprising the step of monitoring the amplitude developed at the backface of the laser device.

19. A method of stabilizing a laser device, said method comprising the steps of:

adjusting a tuning current applied to said laser device in response to output power; and

simultaneously, adjusting a wavelength characteristic of said laser device in response to an optically filtered transmission fraction of said output power.

20. The method of claim 29, wherein said adjusting steps are performed by a programmed microprocessor.